

Name: _____

Date: _____

Test: Perfect Squares, Square Roots and Pythagorean Theorem

Part 1: Multiple Choice: Put the letter in the space provided.

1. _____ $11^2 =$

A) 121

B) 22

C) 222

D) 21

2. _____ $\sqrt{5}$ is about:

A) 5

B) 4

C) 9

D) 2

3. _____ $\sqrt{144}$ is

A) 72

B) 144

C) 11

D) 12

4. _____ $\sqrt{625}$ is:

A) 15

B) 25

C) 5

D) 50

5. _____ Pythagorean Theorem states:

A) $a^2 - b^2 = c^2$

B) $b^2 + c^2 = a^2$

C) $a^2 + b^2 = c^2$

D) $a^2 \times b^2 = c^2$

6. _____ The name of the side of the triangle opposite the right angle is called:

A) the leg

B) the right side

C) Pythagorus

D) hypotenuse

Part 2:

Perfect squares and square roots: SHOW ALL OF YOUR WORK!!

1. Make a drawing to show that 81 is a perfect square.

2. A number has 11 factors. Is it a perfect square? Explain your answer.

3. **Estimate** the following square roots. SHOW YOUR WORK!!

a) $\sqrt{18} =$

b) $\sqrt{50} =$

c) $\sqrt{90} =$

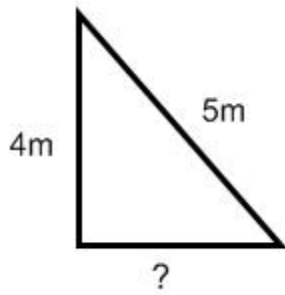
d) $\sqrt{139} =$

Part 3: Pythagorean Theorem

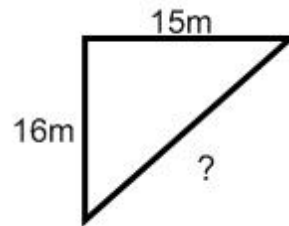
SHOW ALL OF YOUR WORK!!!

Find the length of the missing side.

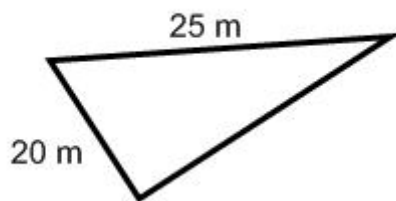
1. a)



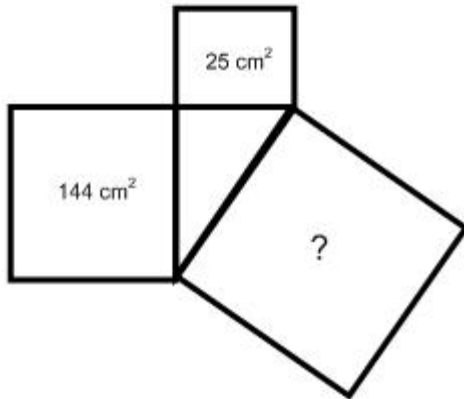
b)



c)

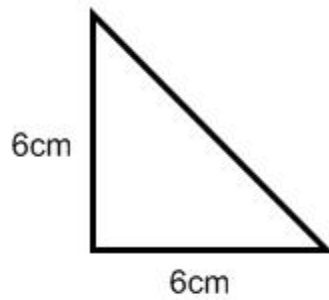


2. Find the area of the missing square. SHOW YOUR WORK!!!



3. Find the perimeter of each triangle.

a)



b)

